



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,856	10/22/2003	Emeline C. Tsai	DIVA/118DIV1	6932

56015 7590 11/30/2006

PATTERSON & SHERIDAN, LLP/
SEDNA PATENT SERVICES, LLC
595 SHREWSBURY AVENUE
SUITE 100
SHREWSBURY, NJ 07702

EXAMINER

SHANG, ANNAN Q

ART UNIT PAPER NUMBER

2623

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,856

Applicant(s)

TSAI ET AL.

Examiner

Annan Q. Shang

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 and 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-14 and 21-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/31/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 10-14 and 21-33 are rejected under 35 U.S.C. 102(b) as being anticipated by **Freeman et al (5,724,091)**.

As to claim 1, note the Freeman reference figures 1-7, discloses compressed digital data interactive programming system and further discloses a method for transitioning between digital video streams, the method comprising:

Serving (Microprocessor 'MP' 108) a first video stream with a packet identifier (PID) value (fig.3, col.4, line 59-col.5, line 20, col.6, lines 23-64 and col.14, line 36+);

Determining (MP-108) shifts needed to be applied to timing information in a second video stream in order to generate recalculated timing information; replacing the timing information in the second video stream with the recalculated timing information (col.14, line 36-col.16, line 1+);

Transitioning (MP-108) in an immediate and smooth manner to a second video stream having the same PID value and serving the second video stream (col.14, line 36-col.16, line 1+).

As to claims 2-3, Freeman further discloses where transitioning in an immediate and smooth manner comprises transitioning without an unsynchronized delay at a beginning of the second video stream and without an unstable period at an end of the first video stream and further comprises transitioning without an unsynchronized delay at a beginning of the second video stream and without an unstable period at the end of the first video stream (col.14, line 36-col.16, line 1+).

As to claim 10, the claimed "A method for transitioning between digital video streams..." is composed of the same structural elements that were discussed with respect to the rejection of claim 1.

As to claims 11-12, Freeman further discloses where the timing information includes decoding and presentation time stamps and includes clock reference values (col.14, line 49-col.15, line 53).

As to claims 11-12, Freeman further discloses where the method is performed at a distribution head end and at a remote hub of a distribution system (col.9, line 20-col.10, line 21 and col.14, line 49-col.15, line 53).

As to claims 21-22, Freeman further discloses where the shifts applied to timing information are adapted to a lag between the time of a transition at a server and the time of the transition at a subscriber station and where the shifts comprise differences between a program clock reference of the first video stream and a program clock reference of the second video stream (col.9, line 20-col.10, line 21 and col.14, line 49-col.15, line 53).

As to claims 23-29, Freeman further discloses where a first packet including recalculated timing information is associated with discontinuity indicator, where the discontinuity indicator is adapted to cause a clock reset at a subscriber station, where the first video stream has associated with a plurality of transition points, each transition point identified via a discontinuity indicator (col.14, line 21-col.16, line 1+), where the transition points are associated with respective reference frames, where the transition points comprise respective beginnings of a stripe sections of a storage drive in a storage array, where the transition points are associated with respective reference frames and where the transition points are associated with respective NULL packets (col.11, line 45-col.12, line 30 and col.14, line 21-col.16, line 1+).

As to claims 30-33, Freeman further discloses receiving a signal to transition from the video to the second video stream and removing packets of the first video and transmitting picture repeat packets in substitute, where the picture repeat packets comprise zero motion vectors, further comprises after receiving the signal to transition and before removing packets, transmitting packets of the first video stream until a first packet comprising a reference picture, receiving a signal to transition from the first video stream to the second video stream and removing packets of the first video stream and inserting NUL packets in substitute (col.11, line 45-col.12, line 30 and col.14, line 21-col.16, line 1+).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

O'Connor (6,480,667) disclose method of time shifting to simultaneously record and play a data stream.

Abecassis (6,289,165) disclose system for and a method of playing interleaved presentation segments.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.

A handwritten signature in black ink, appearing to read 'Annan Q. Shang'. The signature is stylized with a large 'S' and 'h'.

Annan Q. Shang